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Ogechi Adeola and Olaniyi Evans and Ebo Hilson

School of Management & Social Sciences, Pan-Atlantic University,
Lagos, Nigeria, Lagos Business School, Pan-Atlantic University,
Lagos, Nigeria, Department of Marketing & Entrepreneurship,
University of Ghana Business School

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13 Tourism and economic wellbeing in Africa

*Ogechi Adeola, Olaniyi Evans
and Robert Ebo Hinson*

Introduction

Recognising the potential of tourism for enhancing economic wellbeing many countries are increasingly turning to tourism as a vehicle for development (Giaoutzi, 2017; Cornelissen, 2017; Singh, 2017; Bianchi, 2018). Africa is a particularly interesting case to study in light of the level of progress the continent has made in tourism development in the last few decades. However, economic wellbeing in terms of GDP per capita and consumption per capita is very low across most of the continent.

Tourism development brings benefits as well as costs for destination countries (Wang and Pfister, 2008). Benefits include enhanced business growth and the creation of jobs for the unemployed or underemployed, elevating them out of poverty. In addition, tourism has the potential to diversify an economy, making it less dependent on the volatility of one or two sectors. The increased tax revenues and economies of scale induced by tourism enable governments to improve public services (Reeder and Brown, 2005). On the other hand, many of the potential costs of tourism development are linked to the resulting rapid growth of the destination countries. The growth can erode both natural and cultural amenities, for example, by despoiling scenic views and historic sites. Tourism may lead to pollution, health-related problems, road congestion, higher housing costs, overcrowded schools, higher crime rates and strained public services (Archer, Cooper, and Ruhanen, 2005; Reeder and Brown, 2005).

With this tangle of positive and negative effects of tourism, it is understandable why experts and policy makers may be uncertain about the value of tourism for economic wellbeing. There are concerns about the potential effects on poverty, crime and other socioeconomic conditions. This study considers the validity of these concerns by analysing recent data on tourism and economic wellbeing in Africa.

Nonetheless, the literature on the relationship between tourism and subjective wellbeing has been expanding in recent years (Chen and Petrick, 2013; Uysal, Sirgy, Woo and Kim, 2016; Smith and Diekmann, 2017). Wellbeing can be studied at different levels of analysis: individual, community, country and regional (Sirgy, 2001; Mancini, George, and Jorgensen, 2012). The majority of studies in the literature, notably, consider wellbeing at the individual level. This study

substantiates the individual-level findings with regional-level empirical evidence in a largely under-studied context, Africa.

The remaining sections are organised as follows. The next section discusses the conceptual and empirical literature on tourism and economic wellbeing. This is followed by a description of the data and the empirical methodology. The analysis section provides the empirical results using the fully modified least square estimation method. The final section provides a summary of the main findings and offers suggestions for future studies.

Literature review

Wellbeing is one of the popular keywords and concepts in fields as diverse as philosophy, management, economics, psychology, medicine and recently in tourist studies (Alexandrova, 2012). As Carlisle, Henderson, and Hanlon (2009) have argued, there is no unanimous definition of wellbeing. It is also safe to argue that the multiplicity of theoretical and conceptual treatments of wellbeing have led to quite blurred and rather broad definitions of the concept (Crisp, 2016; Jayawickreme, Forgeard, and Seligman, 2012). Wellbeing takes many forms and manifests in five central philosophical views, namely, hedonic, life satisfaction, eudaimonic, desire fulfilment and non-eudaimonic objective list (Armenta, Ruberton, and Lyubomirsky, 2015); it may also be categorised as physical, societal or economic wellbeing. In particular, economic wellbeing describes the capacity of individuals, families and communities to consistently meet their basic needs (including food, utilities, healthcare and education). It also includes the capacity to make economic choices and feel a sense of satisfaction with one's finances and employment pursuits, and sustain adequate income throughout the lifespan (Council on Social Work Education, 2018).

Tourism studies are increasingly focused on wellbeing in the last decade, both from a methodological and theoretical perspective. Wellbeing appeared in tourism studies through a range of terms inspired by philosophy and psychology, such as 'life satisfaction' and 'quality of life' (e.g., Pearce, Filep, and Ross, 2010; Dolnicar, Yanamandram, and Cliff, 2012), 'happiness' (e.g., Filep and Deery, 2010) and 'wellness' (Kelly, 2012; Voigt and Pforr, 2013). Quality of life appears to be the most frequently used in place of wellbeing in studies (e.g. Pukeliene and Starkauskiene, 2009; Sirgy et al., 2006; Theofilou, 2013).

According to Uysal et al. (2016), wellbeing is embedded in the very definition of tourism. That is, tourism affects the wellbeing of all in destination communities, not only those who participate in the production and consumption of tourism goods and services. Tourism is a multipart industry: it provides employment, revenues and economic diversity (Delibasic, Karlsson, Lorusso, Rodriguez, and Yliruusi, 2008). Tourism has many forms such as social, economic, cultural and environmental (Godfrey and Clarke, 2000) and is, therefore, a means of economic, social and cultural exchange (Mowforth and Munt, 2003).

Critics have argued that the tourism industry provides seasonal, unskilled, low-wage jobs, and thus negatively impacts local wages and income such that

as the workforce in these jobs increases, tourism expands poverty and unfavourably affects health, education and other aspects of wellbeing (NaRanong and NaRanong, 2011). Tourism could also lead to rapid growth which puts a strain on infrastructure and leads to snags such as road congestion. Conversely, if tourism draws significant inflows of residents, it could improve the fortunes of the country. Development may spark a housing boom and higher demand for goods and services,

resulting in a more diversified economy with more high-paying jobs. Even low-paid recreation workers could benefit if better employment became available. Income levels could rise, along with levels of education, health, and other measures of community welfare, and poverty rates could be expected to decline.

(Reeder and Brown, 2005, p. 2)

In the past three decades, studies (e.g. Allen, Long, Perdue, and Kieselbach, 1988; Ivlevs, 2017; Sharpley, 2014; Woo, Kim, and Uysal, 2015) have investigated community residents' perception of tourism effects on their wellbeing. Allen et al. (1988) found that community wellbeing was perceived to drop as tourism development progressed. Similarly, Ivlevs (2017) in a study on European residents found that tourism negatively influenced residents' life satisfaction, particularly in countries with relatively highly intense tourism.

On the contrary, Milman and Pizam (1988) investigated the attitude of Central Florida residents towards tourism development and found that tourism indeed improves the overall quality of life. In the same vein, Perdue, Long and Kang (1999) examined the relationship between tourism development and several objective indicators of wellbeing in the US. Their study found that all the objective indicators (i.e. income per capita, per student education expenditure, quality of healthcare facilities) improved with increasing levels of tourism development. Woo et al. (2015) likewise found in their study that community residents' perceived value of tourism development positively affects the overall quality of life, and that overall quality of life greatly enhances tourism development.

In addition, Renda, Mendes and Valle (2012) found that tourism positively affects host community residents' quality of life. However, a negative relationship was found between tourism and their emotional and community wellbeing. Reeder and Brown (2005) assessed the effect of recreation and tourism development on socioeconomic conditions in rural recreation counties in the US. They found that recreation and tourism development contribute to rural wellbeing by improving education and health, increasing local employment, wage levels and income, and reducing poverty. Aref (2011) investigated the effect of tourism on quality of life in Iran and showed that tourism has a positive effect on the quality of life of residents. The most significant impacts of tourism were linked to community wellbeing, emotional wellbeing, income and employment.

In the literature, wellbeing is usually measured using objective or subjective indicators. Subjective indicators capture experiences that are important to the

individual. Most studies in the literature use subjective indicators to capture well-being of tourists and residents of host communities. Conversely, objective indicators address social indicators such as income and standard of living, amongst others, which capture economic wellbeing. According to Uysal et al. (2016), there are only a few studies representing this type of research in tourism research, yet, from a practical perspective, studies relying on objective indicators could help better monitor and measure structural and physical changes over time, as well as how visitors and providers may respond to such changes.

Data and methodology

Data

The main data source for this study is the World Bank's (2018) World Development Indicators. These data are complemented with country-level data from the Economist Intelligence Unit on political stability. The data cover the period 1995–2016 and 44 countries in Africa. The countries include Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Comoros, Democratic Republic of Congo, Congo Republic, Cote d'Ivoire, Egypt, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, South Africa, Sudan, Swaziland, Tanzania, Togo, Tunisia, Uganda, Zambia and Zimbabwe.

Model

The dependent variable is a measure of the level of economic wellbeing in each country. Economic wellbeing is a multi-dimensional concept. This multidimensionality, however, leads to high correlations between the indicators and results in higher multi-correlations among them to the extent that using several indicators can lead to redundancy of information and likely cause a multi-collinearity problem, which can result in misleading inferences. To preclude these problems, this study employs the two most commonly used measures of economic wellbeing in the literature, namely, consumption per capita (from the household perspective) and GDP per capita (from the whole economy perspective) (Office of National Statistics, 2014). The two measures are combined into a robust index of economic wellbeing (*Wellb*) using principal component analysis. Note that higher values imply higher economic wellbeing.

The main explanatory variable is tourism. In the literature, there are two measures of tourism: international tourism arrivals and international tourism receipts. To guard against possible multi-collinearity problems, the two measures are combined into a robust index of tourism activities (*Tour*) using principal component analysis. Note that higher values imply higher tourism activities.

A more serious concern with the estimation results is the possibility of spurious correlation or omitted variable bias problem (Gujarati, 2003; Evans et al.,

2018; Evans, 2018a). That is, tourism could pick up the effects of other variables not controlled for in the model specification which are correlated with both the measures of economic wellbeing as well as tourism. To guard against the omitted variable bias problem, this study controls for a number of country-level variables including GDP growth, capital formation, FDI, trade openness, internet usage, government spending and political stability. It is natural to expect GDP growth, capital formation, government spending and political stability to be higher in countries with higher economic wellbeing (Barro, 2003; Ciccone and Jarociński, 2010; Evans, 2017; Evans and Alenoghena, 2017; Evans and Saibu, 2017; Moral-Benito, 2012; Petrakos and Arvanitidis, 2008). Further, the literature suggests that GDP growth, capital formation, FDI, trade openness, internet usage, government spending and political stability may reinforce tourism (Adeola, Boso, and Evans, 2018; Asrin, Pouya, and Khalid, 2015; Khoshnevis and Khanalizadeh, 2017).

The resulting function is:

$$\begin{aligned} Wellb_{it} = & \rho_0 + \rho_1 Tour_{it-1} + \rho_2 Growth_{it} + \rho_3 Capf_{it} + \rho_4 Fdi_{it} + \rho_5 Trade_{it} \\ & + \rho_6 Internet_{it} + \rho_7 Govt_{it} + \rho_8 Polstab_{it} + \varepsilon_{it} \end{aligned} \quad (13.1)$$

Where, $i = 1, 2, \dots, N$, that is, the 44 countries selected for the study; t refers to the year; *Wellb* is economic wellbeing; *Tour* is tourism; *Growth* is GDP growth; *Capf* is capital formation (% of GDP); *Fdi* is net inflows of foreign direct investment (% of GDP); *Trade* is trade openness; *Internet* is internet users (% of the population), *Govt* is government spending (% of GDP); and *Polstab* is political stability.

Estimation technique

The fully modified least square (FMOLS) is employed for analysis. A semi-parametric approach designed to provide optimal estimates of co-integrating regressions, FMOLS is robust to serial correlation and endogeneity problems (Adeola and Evans, 2017; Evans, 2018b; Evans and Kelikume, 2018). Hence, the estimates are robust and consistent. Furthermore, FMOLS is applicable to data series irrespective of their order of integration, i.e. whether they are purely $I(0)$, purely $I(1)$ or mixed (Phillips and Hansen, 1990). Extensive discussion of the FMOLS approach can be gleaned from Phillips and Hansen (1990) and Pedroni (1995, 2000).

Empirical analysis

The main regression results are summarised in Table 13.1 (for pre-estimates, see Appendix 1). The results are obtained using the FMOLS estimation method. To better assess the robustness of the parameter estimates to different specifications, the model is estimated using 1995–2016 and 2005–2016 as sample periods (Tables 13.1 and 13.2). Using the 1995–2016 sample period, the estimation results in Table 13.1 show a positive relationship between tourism and economic wellbeing, and the relationship is statistically significant at the 1% level (column 1). Higher levels of tourism are correlated with higher levels of economic wellbeing.

Table 13.1 Tourism and economic wellbeing (1995–2016)

	1	2	3	4	5	6	7	8
<i>Tourism</i>								
<i>GDP growth</i>		0.014*	0.014*	0.012*	0.012*	0.056*	0.053*	0.065*
<i>Capital formation (% of GDP)</i>		0.005*	0.003***	0.003***	0.003***	0.005*	0.003**	0.003
<i>FDI (% of GDP)</i>			0.005**	0.004**	0.004**	0.004*	0.006*	0.006*
<i>Trade openness</i>				0.005**	0.006*	0.005*	0.005*	0.005**
<i>Internet usage</i>					−0.008	0.006	−0.008	−0.002
<i>Government spending (% of GDP)</i>						0.009*	0.008*	0.006*
<i>Political stability</i>							0.005**	0.007**
<i>R Squared</i>		0.993	0.993	0.993	0.995	0.995	0.996	0.997
<i>Observations</i>	652	698	684	676	646	630	659	458
<i>No. of Countries</i>	44	44	44	44	41	41	41	40

Notes: Significance level is denoted by * (1% or less), ** (5% or less) and *** (10% or less).

Table 13.2 Tourism and economic wellbeing (2005–2016)

	1	2	3	4	5	6	7	8
<i>Tourism</i>								
<i>GDP growth</i>		0.093*	0.098*	0.069*	0.069*	0.028*	0.032*	0.057*
<i>Capital formation (% of GDP)</i>			0.003**	0.001***	0.001	0.004*	0.001	0.002**
<i>FDI (% of GDP)</i>				0.008*	0.007*	0.005*	0.004*	0.005*
<i>Trade openness</i>					0.002	0.003*	0.003**	0.004**
<i>Internet usage</i>					−0.003	0.007	−0.005	−0.008
<i>Government spending (% of GDP)</i>						0.007*	0.006*	0.006*
<i>Political stability</i>							0.002***	0.005**
<i>R Squared</i>		0.992	0.992	0.994	0.993	0.995	0.996	0.998
<i>Observations</i>	422	450	454	452	421	415	416	418
<i>No. of Countries</i>	44	44	44	44	41	41	40	40

Notes: Significance level is denoted by * (1% or less), ** (5% or less) and *** (10% or less).

However, this estimation may be spurious, as tourism may be spuriously picking up the effect of other variables, thus biasing the strength of the relationship. Columns 2 to 8 show that this is indeed the case. The estimated coefficient value of tourism increases substantially from .014 to .065 and is always significant at less than the 1% level. As expected, GDP growth, capital formation (% of GDP) and FDI (% of GDP) are associated with higher economic wellbeing, and the association is significant at the 1% level. There is no statistically significant impact of trade openness on the level of economic wellbeing in any of the specifications discussed in the chapter. Internet usage, government spending (% of GDP) and political stability are associated with higher economic wellbeing, and the association is statistically significant.

To better assess the robustness of the parameter estimates to different specifications, the model is re-estimated, using 2005–2016 as sample period. The regression results from the FMOLS regressions are summarised in Table 13.2. The outcome is qualitatively similar to the results above. These results show a positive and statistically significant (at less than the 1% level) relationship between tourism and economic wellbeing, and this holds regardless of the set of controls (columns 1–8, Table 13.2).

The primary objective of the study is to assess the effect of tourism on economic wellbeing. It is, therefore, appropriate to examine the causality between tourism and economic wellbeing, considering that, in the literature, if a pair of $I(1)$ series are cointegrated, then there must be a unidirectional causality running in either way (Engle and Granger, 1987). The tourism and economic wellbeing variables are non-stationary, stationary after first differencing and cointegrated. Table 13.3 summarises the results of the short-run and long-run Granger causality. In the short run, there is causality running from tourism to economic wellbeing at the 5% level. In addition, there is causality running from economic wellbeing to tourism at the 1% significance level. Furthermore, the statistical significance of *Ect* implies the presence of long-run causality. In the long run, there is causality running from tourism to economic wellbeing at the 1% level. Also, there is causality running from economic wellbeing to tourism at the 1% significance level.

Discussion

The FMOLS estimations have shown a statistically positive association between tourism and economic wellbeing, meaning that increased tourism is associated

Table 13.3 Panel Granger causality test results

	Short-run causality	Long-run causality
	F-stat	ECT
<i>Internet usage</i> → <i>Economic wellbeing</i>	4.81**	−0.01*
<i>Economic wellbeing</i> → <i>Internet usage</i>	2.57*	−0.09*

Notes: Significance level is denoted by * (1% or less) and ** (5% or less). The optimal lag length was selected using the Schwarz information criteria.

with increased wellbeing. This finding is comparable with other studies in the literature (for example, Woo et al., 2015). According to Uysal et al. (2016), tourism affects the wellbeing of all in destination communities, not only those who participate in the production and consumption of tourism goods and services. Tourism provides employment, revenues and economic diversity (Delibasic et al., 2008), and therefore has various positive impacts on wellbeing.

The short-run and long-run causality has also shown bi-directional causal linkages between tourism and economic wellbeing. The causality analysis thereby implies that tourism leads to economic wellbeing while economic wellbeing also leads to the expansion of tourist activities in both the short and long run. The results, therefore, provide evidence that while tourism plays significant roles in increasing economic wellbeing, economic wellbeing also plays significant roles in the expansion of tourism, in both the short and long run. The implication is that once a country becomes a tourist destination, the wellbeing of the residents is affected by tourism, and the wellbeing of the residents is vital for the development, operation and sustainability of tourism (Kim, 2002).

In summary, tourism causes wellbeing, by its tourism contribution to the GDP generated by industries involved directly with tourists, including airlines, hotels, travel agents, and other transport services, and the activities of restaurant and other leisure industries (Bilen, Yilanci, and Eryüzü, 2017; Roudi, Arasli, and Akadiri, 2018; Suhel and Bashir, 2018). It contributes employment within the travel and tourism industry and also boosts spending within the country by international tourists for both leisure and business trips, including spending on transport and hotels, as well as government spending on travel and tourism services directly linked to visitors, such as recreational (e.g., national parks) and cultural (e.g. museums) services, tourism promotion, visitor information services, public services and other administrative services (Allan, Lecca, and Swales, 2017; Kubickova and Li, 2017; Srakar and Vecco, 2017). Moreover, economic wellbeing is achieved by individuals, families and communities through tourism when tourist attractions and activities ensure their ability to access skills and economic resources, as well as opportunities for generating income and asset-building and providing opportunities for secure employment with ample compensation and benefits for all (Kim, 2002).

Conclusion

The significant effect of tourism on economic wellbeing suggests that promoting tourism for increased economic wellbeing is both strategic and urgent. African countries need more strategic focus on fostering tourism as a significant source of economic wellbeing. It is also imperative that stakeholders and policy makers have knowledge of the implications of their actions and inactions in the overall interest of the short-run and long-run effects of the tourism sector on economic wellbeing in Africa.

The study has also shown that the relationship between tourism and economic wellbeing is strengthened in magnitude by controlling for the large number of

country-level variables. As expected, GDP growth, capital formation (% of GDP) and FDI (% of GDP) are associated with higher economic wellbeing. Further, internet usage, government spending (% of GDP) and political stability are associated with higher economic wellbeing. The implication is that enabling macroeconomic environment and political stability is important for the increased positive contribution of tourism to economic wellbeing. Governments of these African countries should, therefore, prioritise enabling macroeconomic environment and political stability in order to attract tourism development and, in turn, to boost economic wellbeing on the continent.

This study focused mainly on Africa. Further insights may come from extending the analysis to include other continents. Future research could also address issues related to tourism impacts on other aspects of economic wellbeing, such as public services. Our understanding of tourism effects might also benefit from different constructions of the econometric model. For example, future models could be fine-tuned to focus on individual countries or types of tourism activities. More sophisticated models may unravel specific transmission channels between tourism and economic wellbeing.

Appendix 1

The first step of the analysis is to assess the existence of unit root in the data and to determine the degree of integration of the series. Theoretically, a process is either $I(0)$, $I(1)$ or $I(2)$. Therefore, this study applies panel data unit root tests: Im, Pesaran, and Shin (2003) and Levin, Lin, and Chu (2002). Im et al. (2003, hereafter IPS) allows for heterogeneity in the individual deterministic effects and heterogeneous serial correlation of the error terms (see Evans, 2015; Evans, 2016; Evans and Adeoye, 2016). In order to facilitate comparisons, the results of another panel unit root test, Levin et al. (2002, hereafter LLC), is also provided. Table 13.4 summarises the results of the IPS and LLC unit root tests. The test results show that the variables had unit root properties and had to be differenced. After differencing, the time series became integrated of order one and showed no unit root properties.

Having confirmed the non-stationarity of the data series, it is natural to test the existence of a long-run relationship between the series. Kao residual co-integration test is used to examine the co-integrating relationships among the variables. Table 13.5 summarises the results of the co-integration test. The test results

Table 13.4 Summary of panel data unit root tests

	<i>Level</i>		<i>First Difference</i>	
	<i>IPS</i>	<i>LLC</i>	<i>IPS</i>	<i>LLC</i>
<i>Wellb</i>	2.23	-2.53	-15.59*	-18.77*
<i>Tours</i>	1.17	-3.06	-18.52*	-22.89*
<i>Growth</i>	2.46	2.41	-19.33*	-19.24*
<i>Capf</i>	-0.78	-2.54*	-24.02*	-32.34*
<i>Fdi</i>	-1.27	-1.52	-9.06*	-8.23*
<i>Trade</i>	0.03	0.37	-3.26*	-5.42*
<i>Internet</i>	40.96	30.27	-2.78*	-3.99*
<i>Govt</i>	-0.60	-0.43*	-3.59*	-3.99*
<i>Polstab</i>	-1.91**	-2.47	-8.70*	-17.38*

Notes: Significance level is denoted by * (1% or less) and ** (5% or less). The tests assume asymptotic normality.

Table 13.5 Kao residual co-integration test

	<i>t</i> -Statistic	<i>Prob.</i>
<i>ADF</i>	-2.686*	0.004
Residual variance	0.001	
HAC variance	0.002	

Notes: Significance level is denoted by * (1% or less); Newey-West automatic bandwidth selection and Bartlett kernel.

indicate the presence of long-run co-integrating relationships among the set of variables at the 1% level of significance.

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